



an Open Access Journal by MDPI

# **Processing, Properties and Applications of Ferroelectric Composites**

Guest Editor:

# Dr. James Roscow

Materials and Structures Centre, Department of Mechanical Engineering, University of Bath, Bath, UK

Deadline for manuscript submissions: closed (20 February 2022)

### Message from the Guest Editor

Ferroelectrics are key technology enablers due to their versatile functional properties that arise from their inherently polar nature. Combining a ferroelectric ceramic with a compliant second phase, or embedding ferroelectric particles in a polymer matrix, to form a composite is a facile method of tailoring their functional properties for a range of applications, compared to monolithic ferroelectric single crystal, ceramic or polymer systems, whilst also improving their mechanical resilience. The effect of the ferroelectric composite microstructure, i.e. the morphology and connectivity of the constituent phases, determines how the material interacts with local electric. mechanical and thermal fields.

In this Special Issue, modern trends and future directions in the processing, microstructure, properties and applications of ferroelectric composites are highlighted and discussed.

It is my pleasure to invite the submission of manuscripts for this Special Issue. Full papers, communications and reviews are all welcome.









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

### Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials. materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

### **Contact Us**

*Materials* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi